



What is a Forest?

The term 'forest' is used for areas where trees grow more than two metres tall and shade more than 20% of the ground.

Trees may be the first things you see when you visit a forest, but they are only one part of a complex ecosystem - a community of life forms which depend on each other to make best use of available water and nutrients.

Forests are one of the earth's most important natural resources. These are just some of the vital roles they play:

- 🌳 Providing a habitat for all the living things contained within them. Apart from trees, a forest is made up of its soil, water, other plants, insects, reptiles and amphibians, birds and mammals. Every living thing in the forest is dependent on other living things in the forest for its survival.
- 🌳 Providing shelter, food and warmth for human beings.
- 🌳 Providing employment and useful products.
- 🌳 Being a precious environment for us to enjoy.
- 🌳 Ensuring that water, minerals, gases and trace elements stored in vegetation and the soil are recycled to maintain soil fertility.
- 🌳 Forming soil and providing protection from soil erosion.
- 🌳 Protecting water supplies and improving water quality. Water is filtered by the soil and vegetation of the forest, and sediments and pollutants are removed before the water runs into rivers or underground water tables.
- 🌳 Storing carbon and helping to reduce the effects of global warming.

Native Forests

There are three main groups of forest types around the world: boreal or softwood forests, temperate hardwood forests, and tropical and subtropical hardwood forests.

The types of native forest in Australia vary according to climate and location.

South Australia's native forests are part of the temperate hardwood forests known as 'dry sclerophyll forests'. The term 'sclerophyll' means 'hard-leaved' and refers to species that have developed drought-resistant leaves with thick cell walls and a cuticle or outer skin. The main tree species in dry sclerophyll forests are eucalypts, acacias, she-oaks and banksias.

Biodiversity, Habitat and Interdependence

Biodiversity is the existence of a wide variety of plant and animal species all living in their natural habitats. There are three ways of describing biodiversity:



Plant and animal species living in their natural habitats.

Find Out More

National Forest Education and Awareness Network - www.australianforests.org.au

What is a Forest?

1. Ecosystem diversity is biodiversity within different environments, relating to factors such as location, climate and the availability of water and nutrients. South Australia's various forests, plantations and woodlands are examples of different ecosystems.
2. Species diversity relates to the rich variety and number of different plants and animals found in a particular ecosystem. South Australia's dry sclerophyll forests support a great variety of plants and animals.
3. Genetic diversity relates to the amount of variation found within members of the same species. For example, humans can have different coloured eyes, hair, and skin, and a huge variety of facial features and body shapes and sizes.

Each native and plantation forest type occurs in, and creates, a particular habitat, and different kinds of insects, birds and other animals move in to make use of the shelter, food and water that is available in them. Each

of these species fills a niche in the habitat. This determines how the species behaves and how it interacts with other organisms. For example, some insects will fill a niche that cleans debris off the forest floor. These insects provide food for forest reptiles, which in turn are eaten by forest birds. These birds, or their bodies when they die, then provide food for other insects, birds and mammals.

Native Forest and Plantation Forest Habitats

Plantation forests provide habitats for a wide variety of animal life. They form part of a mosaic across the landscape that helps to maintain the biodiversity of that landscape. This mosaic may also include native forests, farmed land, creeks, rivers and other water bodies and the native vegetation around them, as well as corridors of native vegetation along which animals can travel.

Plantation forests often consist of a single species of tree, all of the same age. In some situations, foresters plant mixtures of native and farmed species. The trees can still be used for timber but, as an added benefit, the biodiversity of the forested area is increased.



Close up of a forest insect.